

**Troy City School District
New Elementary School #14
Troy, New York**

Owner: Troy City School District

Total Construction Cost: \$8,000,000.00

Master planning, educational programming and comprehensive engineering design services for new 813-student elementary school. Program included 34 classrooms, music room, art room, cafetorium (combination auditorium and cafeteria), two-station gymnasium, 600 s.f. indoor pool, locker rooms, and pupil services suite with facilities for school nurse and psychologist, guidance offices, speech therapy, administrative offices and faculty support spaces.

Mechanical systems included 4-pipe hot water/chilled water system. Hot water was provided by the school district's central steam plant. Medium pressure steam flowing through a heat exchanger provided heat source for the high temperature hot water underground loop which was used for the new elementary school hot water system.

The underground High Temperature Hot Water is circulated by split case pumps located in the Main Boiler Plant. This high temperature hot water loop provided heat through a heat exchanger where a secondary hot water system circulated through the elementary school. The Chilled Water Plant for the Elementary School is independent to the High School and is located at the Elementary School.

Electrical systems included direct and indirect lighting systems, sound systems, fire alarm system, wiring for cable television and computer network distribution.
(Work performed by Karen Astorga, P.E. as head of the Engineering Department for Crozier Architects)



PLUMB ENGINEERING, P.C.

4 Wolfert Avenue, Albany, New York 12204 Phone: 518-465-6037 Fax: 518-465-5210 E-Mail: Engineers@Plumbpc.com